Déjà Vu All Over Again: Explaining Mexico's 1994 Financial Crisis

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President Diaz has taken a firm stand against extravagance and over pledging of the national credit. He favors the encouragement of banking [in Mexico] in order that the people may begin to look more to bankers than the government for aid in carrying forward new undertakings ... The country has shown a most gratifying growth as a consequence of building the present railroads, and imports and exports have increased rapidly, but it is the belief of the President that it is safer to go slowly and surely and maintain at the highest point the good faith of the country toward all its creditors. (*New York Times*, 15 May, 1891)

1. INTRODUCTION

SINCE 1970 Mexico has experienced no less than three major economic crises — in 1976, 1982, and 1994. The most recent began on 20 December, 1994 when Mexico announced that the peso would be devalued by roughly 15 per cent against the dollar. The announcement caught many foreign and domestic investors by surprise and precipitated a 'speculative attack' on the peso and a massive outflow of foreign and domestic capital. Over the next two days, Mexico lost roughly $4 billion in foreign reserves, and on 22 December reported that the peso would be allowed to float freely. These events had a catastrophic effect on Mexico's financial markets and raised serious doubts about the country's ability to refinance billions of dollars in short-term debt. By March 1995, the peso had lost over half its value against the dollar, the Mexican *bolsa* (stock market) had fallen over 40 per cent in peso terms and over 70 per cent in dollar terms, and interest rates on short-term Mexican debt (Cetes) reached 85 per cent. But the crisis had repercussions far beyond Mexico's borders. Financial markets throughout Latin America and Asia also came under pressure as investors

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sought to limit their exposure to 'emerging' markets. Ultimately, $50 billion in loans and credits from the United States, the IMF and the Bank of International Settlements, and a package of economic reforms from the Zedillo administration were needed to calm international capital markets and avert a global financial panic.[1]

The purpose of this paper is to trace the macroeconomic roots of the December 1994 devaluation through a detailed analysis of the Mexican economy. Simply stated, the paper will argue that Mexico's most recent crisis was the consequence of three closely related factors: (1) a massive inflow of foreign capital in the early 1990s, (2) inappropriate policy responses by the Mexican monetary authority, and (3) the traditional economic expansion associated with the final years of the election cycle. Although capital flows are the primary focus of this investigation, many other factors contributed to the unstable economic and political conditions which fostered the crisis. These include the assassination of presidential candidate Luis Colosio and the Zapatista uprising in 1994, insufficient liberalisation of key sectors of the economy and political and legal institutions, structural rigidities in the Mexican economy, and increased foreign competition associated with the North American Free Trade Agreement (NAFTA). At the very least, these factors help to explain the high volatility of capital flows into (and out of) Mexico, and the destabilising effect these flows had on the economy.

Large amounts of foreign capital began pouring into Mexico shortly after the initial announcement of a US-Mexico trade pact in 1990, and reached nearly ten per cent of GDP by 1993. Given the magnitude of these inflows relative to the size of the Mexican economy, much of this capital went into unproductive investment, fueling a speculative 'bubble' in Mexican financial markets and an unsustainable 'boom' in the domestic economy. But the capital inflows of the early 1990s were merely a catalyst; the economic crisis was the direct result of the policies pursued by the domestic monetary authority — although in all fairness, it would have been extremely difficult for the central bank to prevent serious economic dislocations given the size and volatility of these flows. Of particular concern were the rapid expansion of domestic credit and lending — much of it to finance real estate loans and consumer spending — and the large increase in foreign liabilities that accompanied the inflows. These problems were exacerbated by the maintenance of an inappropriate exchange rate against the dollar. Since rates of inflation were higher in Mexico than the United States in the early 1990s, the peso became progressively overvalued, stimulating imports and the 'flight' of domestic capital. The traditional economic expansion during the final years of the Salinas administration added further pressures to the economy.

[1] For a detailed analysis of the events leading up to the 1994 crisis see IMF (1995a, particularly pp. 53–69.

Since the early 1970s, the Mexican economy has experienced a series of 'boom-bust' cycles which are closely tied to the presidential election held every six years. In general, the incoming president pursues contractionary policies in the early years of an administration in order to bring inflation under control and stabilise the economy. However, within a year or two of taking office more expansionary policies are adopted based on the rapid growth of government spending and consumer credit, and increased foreign borrowing by the public and private sectors. This shift has several predictable results. First, it encourages domestic consumption and inflation. Second, it stimulates imports, creating a trade deficit. Finally, the combination of a growing trade deficit and the cost of foreign debt service pushes the current account into deficit, draining foreign reserves. In most cases, a crisis is averted until *after* the next election, at which time a devaluation of the peso often sparks a financial panic. This pattern is clearly evident in the years immediately preceding the 1994 devaluation.

Taken together, these three factors provide a compelling explanation for Mexico's 1994–5 economic crisis. They also raise important policy issues for other developing nations that use foreign capital to finance domestic consumption and investment. Given the unpredictable nature of international capital flows, it is quite likely that other nations will face similar crises in the future. Finally, Mexico's recent experience poses important strategic challenges for multinational enterprises which have invested heavily in developing countries both as platforms for international sourcing and as potential consumer markets. The dislocations which often accompany periodic economic crises can have a negative impact on local demand, while the excessive volatility of domestic exchange and/or interest rates may reduce a country's value as a sourcing location.

2. MEXICAN CAPITAL INFLOWS — 1988–94

In the spring of 1990, President Carlos Salinas de Gortari of Mexico proposed the creation of a free trade area between his country and the United States. The proposal quickly expanded to include Canada, and in February 1991 the three countries began negotiating the North American Free Trade Agreement. The agreement was signed on 17 December, 1992 and went into effect on 1 January, 1994.[2] NAFTA was only one of the many economic and political reforms implemented by Salinas in his efforts to liberalise Mexico's economy and political system and improve the country's economic performance. During his administration over a thousand state-owned companies were privatised — including large national banks and the national telephone company (Telmex),

[2] Sources for background information on NAFTA include: Pastor (1994) *Business Week* (1993); and *U.S. News and World Report*(1993).

TABLE 1
Economic Indicators, Mexico, 1988–94

	1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*
GDP ($b)	171.8	208.2	247.1	290.5	334.3	367.6	377.1
Real GDP growth	—	3.3	4.5	3.6	2.8	0.7	3.5
Inflation (CPI)	114.4	20.0	26.6	22.7	15.5	9.7	6.9
Govt. surplus or (deficit) (%GDP)	(10.3)	(5.0)	(2.8)	(0.2)	1.5	0.3	(0.8)
Govt. Consumption (%GDP)	8.6	8.4	8.3	8.9	9.9	10.7	11.6
Gross fixed capital form. (%GDP)	19.3	17.9	18.4	19.2	20.5	20.0	20.3
Exchange Rate (new peso/$)	2.273	2.462	2.813	3.018	3.095	3.116	3.375
Total Foreign Debt ($b)	99.2	93.8	106.0	115.4	113.4	118.0	—

Source: International Financial Statistics; IMF; October 1995 and June 1996; except Total Foreign Debt taken from *World Debt Tables*, 1994-95, Vol. 2, Country Tables; World Bank.

financial markets were liberalised, and an agreement was reached to reschedule Mexico's foreign debt.[3]

Table 1 provides an overview of Mexico's economic performance under Salinas (December 1988–December 1994). Real rates of GDP growth averaged roughly three per cent over the period, while annual rates of inflation declined dramatically and the government budget moved from deficit to surplus. Although this performance pales next to the rapid growth of many Asian economies, it represented a vast improvement over Mexico's performance during the 1980s. For the 1980s as a whole, real GDP grew at an annual rate of just 1.2 per cent and actually declined 0.5 per cent in per capita terms, while inflation averaged 66.5 per cent per annum.[4] Further, the Salinas administration often delayed the release of important economic data or reported figures that were later revised in order to maintain the confidence of international investors and assure the passage of NAFTA.[5] As a result, contemporary estimates of Mexico's economic performance in the popular press in the early 1990s were often far more optimistic than these figures suggest.

The perceived strength of the Mexican economy and the liberalisation of the banking and financial sectors in the early 1990s quickly attracted the attention of international investors, and by 1992, the Mexican bolsa had become the world's second largest 'emerging' stock market.[6] In 1993, Hartmann and Khambata noted that Mexico's financial markets were

[3] An overview of the Salinas administration appears in *Business Week* (1995a).
[4] World Bank (1993, Table 1).
[5] For example, Mexico's entry in the IMF's 1995 *International Financial Statistics Yearbook* failed to include timely information on government finance (revenue, expenditure, surplus or deficit, and borrowing). Although Mexico provided most economic statistics through 1994, the most recent (preliminary) data on government finance was for 1990. Similarly, estimates for Mexico's national accounts during the early 1990s continued to change — often dramatically — from yearbook to yearbook. Needless to say, this has made it difficult to construct some of the tables presented above.
[6] International Finance Corporation (1993).

TABLE 2
Capital Inflows, Mexico, 1988–94 ($m)

	1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*
Net direct investment	2,011	2,785	2,549	4,742	4,393	4,389	7,978
Net portfolio investment	121	298	−3,985	12,138	19,206	28,355	7,574
Other investment, net	−6,627	−1,973	9,877	8,259	3,440	1,016	−2,798
Total net capital inflows	−4,495	1,110	8,441	25,139	27,039	33,760	12,754
Total inflows (%GDP)	−2.6	0.5	3.5	8.7	8.2	9.3	3.4

Source: *International Financial Statistics*; IMF; October 1995 and June 1996.

> ... widely regarded by foreign investors as possessing accounting standards, regulatory mechanisms, and settlement procedures of internationally-acceptable quality, along with an openness to [foreign portfolio investment] comparable to that in developed markets ...[7]

The economic and financial reforms implemented by Salinas increased the confidence of international investors and precipitated a rapid inflow of foreign capital. This is clearly visible in Table 2 which details capital flows into Mexico in the late 1980s and early 1990s.

Net inflows of direct investment doubled between 1990 and 1991, and doubled again between 1991 and 1994, while net flows of portfolio investment — which were negative in 1990 due to 'write offs' in the value of Mexican bonds under the Brady Plan — surged to $12 billion in 1991 and grew to $28 billion in 1993. During the first three quarters of 1994, net portfolio inflows totaled roughly $13.5 billion; however, these flows turned negative after the December 1994 devaluation of the peso. Between the fourth quarter of 1994 and the third quarter of 1995, portfolio investment in Mexico declined by over $16.5 billion. Conversely, inflows of foreign direct investment continued to grow throughout 1994, and declined only modestly in 1995.[8]

Finally, after a long decline in the 1980s, lending by foreign commercial banks and multilateral agencies (included under 'Other') surged in 1990–91 following Mexico's successful rescheduling of $48 billion in outstanding debt under the Brady Plan. As part of this plan, foreign banks agreed to extend new loans to Mexico and the IMF, World Bank and Japan pledged an additional $5.8 billion.[9] Foreign loans to Mexican firms also increased, reflecting improved economic conditions. This spate of lending was relatively short-lived, however, and by 1994 repayments exceeded new loans.

In total, net capital inflows averaged nearly nine per cent of Mexican GDP between 1991 and the first half of 1994, and during the early 1990s, Mexico received roughly a quarter of all capital inflows and half of all portfolio inflows to developing countries.[10]

[7] Hartmann and Khambata (1993).
[8] IMF (1997).
[9] A summary of these lending activities appears in Economist Intelligence Unit (1992).
[10] IMF (1995a, Table 1).

3. THE IMPACT OF CAPITAL INFLOWS ON THE MEXICAN ECONOMY

Large capital inflows can have a destabilising effect on the recipient's economy and balance of payments. Six problems are common, and they vary in severity depending on the unique economic and institutional characteristics of the host.[11] First, capital inflows put upward pressure on the recipient's exchange rate. This is important for two reasons: (1) the appreciation of the exchange rate reduces foreign demand for local exports and increases local demand for foreign imports, pushing the country's current account toward deficit, and (2) if the exchange rate becomes highly overvalued it encourages the 'flight' of domestic capital.

Second, capital inflows affect the size and structure of the domestic banking system. As capital inflows make their way through the host economy, they add deposits and hence reserves to the banking system. The rapid growth of bank reserves creates two problems: (1) it encourages the expansion of credit and lending which adds inflationary pressures to the economy, and (2) over time, lending may become more speculative in nature raising the level of risk in the banking system.

Third, large inflows of foreign portfolio investment raise the prices of local financial assets and may cause a speculative 'bubble' in local financial markets. The resulting increase in the market values of local firms and the net worths of local investors may be used to finance additional consumption or investment. Further, ready access to foreign capital may encourage local governments and public enterprises to over-borrow in international bond markets. All of this adds inflationary pressure to the economy and may encourage speculation and non-productive investment.

Fourth, large inflows of direct investment inflate the prices of local real estate, raw materials and (skilled) labour — particularly in the short-run — as foreign investors compete for scarce resources. This problem may be especially acute in developing countries due to the presence of production bottlenecks and structural rigidities, under-developed physical and institutional infrastructures, and inflexible human and physical resources. Further, although the competition associated with these direct investments may reduce prices and improve economic efficiency in the long-run, these benefits often come at a high cost to local workers and producers.

Fifth, the payment of interest, dividends, royalties, and other fees to foreign investors and lenders, and the repatriation of foreign capital and principal, push the current and capital accounts toward deficit, and may cause balance of payments problems.

[11] These and other problems are discussed in detail in IMF (1995a, pp. 80–127). Also see Blaine (forthcoming).

Finally, as Mexico's experience clearly illustrates, countries that depend on capital inflows to increase domestic consumption or investment, finance a current account deficit, or support an overvalued exchange rate become extremely vulnerable to a sudden reduction or reversal of those flows. The resulting capital outflows put downward pressure on the exchange rate and drain foreign reserves from the central bank, which in turn causes a contraction in economic activity and credit, and often precipitates a sharp decline in local financial markets. As Mexico's recent experience also illustrates, once this process begins it may take several years for foreign investors to regain enough confidence in the local economy and financial markets to commit additional capital.

In the years leading up to the 1994 crisis, Mexico experienced all of these problems. Specifically, the capital inflows of the early 1990s were associated with the rapid expansion of money and credit, rising domestic prices and imports, and an increase in foreign liabilities. Mexico also experienced a rapidly expanding current account deficit which placed constant pressure on its international reserves. By December 1994, Mexican authorities were forced to devalue the peso in an attempt to reduce the current account deficit and conserve the country's dwindling foreign reserves. The move caused foreign (and domestic) investors to withdraw large amounts of capital from Mexico and sparked a financial crisis.

One of the most common effects of large capital inflows — the appreciation of the domestic currency — was concealed to some extent by Mexico's tight control over exchange rates. In November 1991, Mexico abolished the system of dual exchange rates which had been in effect since 1982, and established a 'crawling peg' which allowed the peso to depreciate at a predetermined rate against the dollar.[12] Although the regime boosted the confidence of foreign investors, over time inflation differentials between the US and Mexico caused the peso to become increasingly overvalued. For example, between 1990 and 1994 prices in Mexico rose about 65 per cent (based on the GDP deflator) compared to only ten per cent in the United States. At the same time, the nominal value of the peso decreased from about 2.80 to 3.40 pesos per dollar — a roughly 20 per cent decline.[13] As a result, the real value of the peso appreciated approximately 20 per cent in these four years.

The overvalued peso had little effect on the inflow of foreign investment, but it had a serious impact on Mexico's current account. This is clearly evident in Table

[12] IMF (1996, pp. 410–11).

[13] Figures for the GDP deflator and peso/$ exchange rate were taken from IMF (1995b). The change in the peso's real value was calculated as follows: using 1990 as the base year (1990 = 100), an index of the nominal peso/$ rate was calculated (1994 = 121). Next an index of relative prices was calculated (1994 = 165/111 = 148.6). Finally, the nominal exchange rate index was divided by the relative price index to give an index of the real exchange rate (1994 = 121/148.6 = 81.4). Thus the real peso appreciated about 20 per cent.

TABLE 3
Balance of Payments, Mexico, 1988–94 ($m)

	1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*
Exports, f.o.b.	30,692	35,171	40,711	42,687	46,196	51,885	60,882
Imports, f.o.b.	−28,081	−34,766	−41,592	−49,966	−62,130	−65,366	−79,347
Trade Balance	2,611	405	−881	−7,279	−15,934	−13,481	−18,465
Services: Credit	6,084	7,208	8,094	8,869	9,275	9,517	9,843
Services: Debit	−6,281	−7,880	−10,323	−10,959	−11,959	−12,046	−12,432
Income: Credit	3,049	3,160	3,273	3,523	2,789	2,694	3,348
Income: Debit	−10,092	−11,261	−11,589	−11,788	−11,998	−13,724	−15,093
Transfers (Net)	2,255	2,543	3,975	2,746	3,385	3,640	4,015
Current Account	−2,374	−5,825	−7,451	−14,888	−24,442	−23,400	−28,784
Direct Investment (Net)	2,011	2,785	2,549	4,742	4,393	4,389	7,978
Portfolio Investment (Net)	121	298	−3,985	12,138	19,206	28,355	7,574
Other Investment (Net)	−6,627	−1,973	9,877	8,259	3,440	1,016	−2,798
Financial Account	−4,495	1,110	8,441	25,139	27,039	33,760	12,754
Net Errors and Omissions	−3,193	4,504	1,228	−2,278	−852	−3,128	−1,636
Overall Balance	−10,062	−211	2,218	7,973	1,745	7,232	−17,666
Reserves and Related Items	10,062	211	−2,218	−7,973	−1,745	−7,232	17,666
Reserve Assets	6,721	−542	−3,261	−8,154	−1,173	−6,057	18,864
Use of Fund Credit & Loans	−84	364	958	161	−572	−1,175	−1,199
Liab. Const. For. Auth. Res.	—	—	—	—	—	—	—
Exceptional Financing	3,424	389	85	20	—	—	—

Source: *International Financial Statistics*; IMF; October 1995.

3 which provides information on Mexico's balance of payments over the 1988-94 period. Between 1988 and 1994, Mexican merchandise exports doubled —due in no small part to the rationalisation of US manufacturing in anticipation of NAFTA. However, Mexican imports more than tripled during the period, turning a small trade surplus into a large trade deficit. When combined with the growing cost of servicing Mexico's foreign debt and paying dividends and royalties to foreigners, the result was an expanding current account deficit. Mexico's current account deficit grew from about 1.4 per cent of GDP in 1988, to 3.0 per cent in 1990, to over 7.0 per cent in 1992, and reached 7.6 per cent of GDP in 1994.

As long as Mexico could attract offsetting inflows of foreign capital it could avert a balance of payment crisis, although the economy became increasingly vulnerable to even a small decline in these inflows. But the overvalued peso had a second important effect; it encouraged the flight of domestic capital, especially given Mexico's uncertain political climate in 1993–94. These outflows decreased the central bank's international reserves making it more difficult to sustain the current account deficit. Although capital flight is extremely difficult to measure, it is undeniable that large amounts of capital were withdrawn from Mexico in the fourth quarter of 1994 and throughout 1995.[14] It is also undeniable that Mexico's

[14] Capital flight and the problems involved in measuring it are examined in Eggerstedt, Hall and Wijnbergen (1995) and Pastor (1990).

TABLE 4
Banking Survey, Mexico, 1988–94 (million of New Pesos)

	1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*
Foreign Assets (Net)	7,438	8,476	10,857	25,887	34,876	51,827	1,790
Domestic Credit	174,663	236,282	305,330	394,778	479,561	537,580	732,826
Claims on Central Govt. (Net)	101,789	119,286	129,566	131,392	91,160	47,292	35,928
Claims on Local Govt.	815	2,037	3,873	6,494	9,729	14,620	23,773
Claims on Nonfin. Public Ent.	17,988	18,453	14,076	6,861	6,511	5,201	8,271
Claims on Private Sector	54,071	96,506	157,815	250,031	372,161	470,467	664,854
Liquid Liabilities	52,717	98,621	173,663	258,555	316,438	367,267	450,480
Money Market Instruments	35,732	27,035	9,148	8,578	15,726	25,025	31,370
Bonds	56	174	210	210	174	188	323
Long-Term Foreign Liab.	79,917	92,653	91,152	103,879	115,125	134,620	271,844
Central Govt. Lending funds (Net)	10,941	12,630	12,673	8,969	9,338	10,063	6,969
Capital Accounts	8,686	15,025	18,453	21,774	31,852	37,947	45,857
Other Items (Net)	−5,948	−1,380	10,888	18,700	25,784	14,296	−72,227

Source: *International Financial Statistics*; IMF; October 1995.

reluctance to depreciate the peso at a faster rate in the early 1990s set the stage for the 1994 crisis. As *The Economist* observed:

> Mexico's problem was less the hot money [i.e. capital inflows] than the fact that it was using it to shore up an over-valued exchange rate.[15]

The capital inflows of the early 1990s also had a dramatic impact on the Mexican banking system. Specifically, they increased bank deposits and reserves and encouraged the rapid expansion of lending and credit and the accumulation of foreign liabilities. This is seen in Table 4 which provides an overview of Mexico's banking system. Total loans increased from 27 per cent to 47 per cent of GDP between 1991 and 1994, while domestic credit tripled between 1989 and 1994, rising from 236 billion (new) pesos to 733 billion pesos.[16] In addition, the structure of credit changed dramatically over the period. In 1989 roughly half of all credit represented claims on the central government while 40 per cent were claims on the private sector; by 1994, claims on central government represented only five per cent of total credit while about 90 per cent were claims on the private sector.

The quality of loans and the creditworthiness of borrowers also declined over time, increasing the level of risk in the banking system. Of particular concern was lending for commercial real estate, financial speculation and consumer credit,

[15] *The Economist*(1995).
[16] The impact of capital inflows on the domestic banking system in general, and Mexican banks in particular is examined in IMF (1995a, pp. 109–19).

since these activities increase inflationary pressures in the economy. For the system as a whole, loans past due rose from 3.5 per cent of total loans (35 per cent of total bank capital) at the end of 1991, to roughly eight per cent of total loans (97 per cent of capital) at the end of 1994.[17] Finally, capital inflows were closely associated with an increase in the foreign currency liabilities of domestic banks. Between 1989 and 1994, the total foreign liabilities of Mexican banks tripled from 92 billion (new) pesos to 270 billion pesos. To some extent, this increase is explained by the overvaluation of the peso which encouraged firms and individuals to borrow heavily in dollars.

Mexico's banking system was severely impacted by the peso's devaluation and the subsequent decline in the prices of domestic securities. Mexican banks had trouble refinancing about $7 billion in dollar denominated certificates of deposit in early 1995, straining their liquidity positions.[18] In addition, the steep rise in domestic interest rates which followed the devaluation greatly increased the amount of non-performing loans. By some estimates as much as 60 per cent of all loans were non-performing in September 1995. Foreign currency loans — which represented about a third of all loans at the end of 1994 — were particularly hard-hit since a large portion of these loans had been extended to borrowers who lacked a stable source of foreign currency income.

In early 1995, a number of steps were taken to strengthen the banking system, including raising the minimum loan loss reserve to 60 per cent of non-performing loans or four per cent of total loans, and the creation of programmes to recapitalise banks which fell below the eight per cent minimum and restructure non-performing loans and mortgages.[19]

Not surprisingly, the money supply also expanded rapidly in the early 1990s as shown in Table 5. M1 grew at an annual rate of 63 per cent in 1990 and 124 per cent in 1991 before falling dramatically in 1992–94, while M2 grew at a rate of 47 per cent in 1991–92 and fell to about 20 per cent in 1992–94. In retrospect, it appears that Mexico's monetary authority did not act quickly or decisively enough to control the expansionary effects of the capital inflows. For example, real interest rates — which were over 25 per cent in 1989 — averaged only two per cent in 1991 and 1992 before climbing back toward ten per cent in 1993–94 (based on a comparison of the market rate of interest and the CPI). Such low real rates supported rather than reduced the expansionary tendencies of the banking sector, encouraging high levels of consumption, imports and speculative investment. On the other hand, the central bank was in the untenable position of having to attract large amounts of foreign capital in order to finance Mexico's growing current account deficit while at the same time maintaining economic stability.

[17] Ibid., p. 125.
[18] The impact of the peso devaluation on Mexican banks is examined in Ibid., pp. 125–6.
[19] These programmes are briefly described in Ibid., pp. 126–7.

TABLE 5
Monetary Survey, Mexico, 1988–94 (million of New Pesos)

	1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*
Currency in circulation	13,201	18,030	24,689	32,513	38,116	43,351	52,035
Demand Deposits	7,130	10,279	21,847	72,772	82,604	98,725	91,106
Money (including other)	21,191	29,087	47,439	106,227	122,220	143,902	145,429
M1 Growth (%)	67.8	37.3	63.1	123.9	15.1	17.7	1.1
Quasi Money	22,257	64,731	117,513	140,108	180,373	202,566	276,320
Money Market Instruments	35,469	22,800	6,503	5,481	5,094	5,447	7,732
M2	78,917	116,618	171,455	251,816	307,687	351,915	421,481
M2 Growth (%)	—	47.8	47.0	46.9	22.2	14.4	22.0
Treasury Bill Rate	69.15	44.99	34.76	19.28	15.62	15.03	14.10
Money Market Rate	69.01	47.43	37.36	23.58	18.87	17.39	16.47

Source: *International Financial Statistics*; IMF; October 1995.

Several approaches could have been used to reduce these expansionary pressures. For example, a reduction in government expenditures and/or an increase in taxes and fees would have lowered aggregate demand and reduced inflationary pressures in the economy. This approach has the added benefit of moving the government budget and the current account toward surplus. Unfortunately, the fiscal policy of the Salinas administration became progressively less sound over time. After reducing the government budget deficit from ten per cent of GDP in 1988 to a surplus of 1.5 per cent of GDP in 1992, the budget moved back into deficit in 1994 (see Table 1). This shift was driven by a dramatic increase in government spending, as government consumption — which averaged 8–9 per cent of GDP between 1988–91 — reached 11.6 per cent of GDP in 1994.

Monetary policy could also have been used to 'sterilize' the expansionary impact of capital inflows.[20] For example, central bank sales of government securities to domestic residents and banks (open market operations) can remove liquidity from the economy and reduce the expansionary bias in the banking system. The same result can be achieved by increasing the reserve requirements for domestic bank deposits or imposing a marginal reserve requirement on new or additional deposits. These policies expand the balance sheet of the central bank rather than the banking system, transferring risk from the latter to the former. Other measures can be used to limit foreign currency lending and/or borrowing. For example, in 1992, Mexico restricted the foreign currency liabilities of commercial banks to ten per cent of their total loan portfolios and imposed a 15 per cent 'liquidity ratio' — an offsetting balance of liquid foreign currency assets — on those liabilities.[21] Other countries have imposed non-remunerated reserve

[20] Sterilisation policies are discussed in detail in Ibid., pp. 80–7 and pp. 109–12.
[21] Ibid., p. 101.

TABLE 6
Prices and Production, Mexico, 1988–94 (1990 = 100)

	1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*
Share prices	33.1	57.7	100.0	190.1	291.3	324.2	446.3
Wholesale Prices	69.8	81.1	100.0	120.5	136.7	148.8	158.9
Consumer Prices	65.8	79.0	100.0	122.7	141.7	155.5	166.3
Monthly Wages	57.3	76.6	100.0	129.1	151.7	164.7	174.6
Industrial Production	90.1	94.8	100.0	104.1	107.3	106.9	111.9
Mfg Production	89.4	95.1	100.0	103.9	106.7	104.5	109.5
Mining Production	96.6	96.1	100.0	100.6	101.5	102.6	104.2
Crude Petroleum	96.4	97.2	100.0	104.0	103.7	103.7	104.6

Source: *International Financial Statistics*; IMF; October 1995.

requirements on foreign currency borrowing. Although Mexico did sterilise a portion of the capital inflows in the early 1990s, the rapid growth of money, credit and foreign liabilities suggests that it did not move fast enough or go far enough in this regard.

Table 6 illustrates the dramatic effect the rapid expansion of money and credit had on domestic prices. Consumer prices grew at about 20 per cent annually in 1991–92, but fell to about ten per cent per annum in 1993–94. Between 1990–94, wages and prices grew about 60–70 per cent. But the most dramatic increases occurred in the prices of domestic equities, reflecting the massive inflow of foreign portfolio investment (see Table 2). Subsequent events strongly suggest that these inflows caused a speculative 'bubble' in Mexican financial markets.[22] Between 1990 and 1992, Mexican share prices nearly tripled in peso terms, and between 1990 and 1994 prices increased about 4.5 times. Increases of this magnitude can have several unwanted side-effects. First, the rapid increase in the market values of local firms and the net worths of local investors may induce them to borrow against these assets to finance additional consumption or investment (the so-called 'wealth-effect'). This encourages inflation, particularly in the prices of real estate, luxury goods and financial assets. Second, rising equity prices may promote a redistribution of wealth away from workers and producers toward speculators and/or cause over-investment in certain sectors of the economy. Finally, since banks generally hold domestic securities as part of their assets, excessive price increases may generate further increases in lending.

Interestingly, industrial production grew only 12 per cent between 1990–94. There are a number of reasons for this meagre increase. First, the vast majority of capital flows into Mexico in the early 1990s were portfolio investments (and bank lending) rather than direct investments (see Table 2). Although these flows can dramatically affect the prices of financial assets, they do not necessarily generate additional production and employment. Second, even in the case of direct

[22] For more information on speculative 'bubbles' and a bibliography of further readings see: Ibid., pp. 175–85.

TABLE 7
National Accounts, Mexico, 1988–94 (millions of New Pesos)

	1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*
Exports of Goods & Services	65,568	81,148	108,299	119,535	128,325	139,948	161,623
Govt. Consumption	33,741	42,915	57,798	77,971	102,751	121,952	147,314
Gross Fixed Capital Form.	75,199	92,220	127,728	168,487	211,934	229,541	258,835
Increase/Decrease in Stocks	4,501	21,465	31,011	37,094	40,830	36,087	39,752
Private Consumption	270,998	356,900	486,354	621,208	735,865	805,684	891,199
Imports of Goods & Services	−59,555	−82,045	−116,318	−147,363	−184,972	−187,831	−225,925
Gross Domestic Product	390,451	512,603	694,872	876,933	1,034,733	1,145,382	1,272,799
Net Factor Income/ Payments	−14,588	−17,511	−20,369	−18,164	−26,302	−30,656	—
Gross National Product	375,864	490,107	666,037	847,002	992,854	1,096,928	—

Source: *International Financial Statistics*; IMF; October 1995 and June 1996.

investments there is often a substantial lag between the time an investment is made and the time production begins. This is especially true in developing countries due to inefficient bureaucracies, structural rigidities, and inappropriate human resources. Finally, many foreign investors prefer to purchase existing productive assets rather than build new 'greenfield' operations. Improved efficiency may generate some gains in output, but in general these investments represent a change in ownership rather than an expansion in the economy's productive capacity. Thus, at least in the short-run, large inflows of foreign capital — regardless of their form — are likely to have a greater impact on prices than output.

Table 7 details Mexico's national accounts and illustrates the combined effect these expansionary pressures had on the economy. The most obvious impact was on private consumption which nearly doubled between 1990 and 1994. Consumption as a percentage of GDP grew from roughly 70 per cent in 1990 to over 72 per cent in 1992 before falling slightly in 1993–94. Given the rather anemic growth in industrial production, a portion of this increased demand was necessarily satisfied through higher imports. In addition, the steady growth of foreign direct investment created a high demand for imports of equipment and intermediate products. Although exports increased rapidly after 1992–93, they failed to keep pace with imports, and between 1990–94 Mexico's trade deficit increased from $1 billion to $19 billion (see Table 3). Under these circumstances, the growing cost of foreign debt service and the maintenance of an overvalued exchange rate had a disastrous effect on Mexico's current account. By late 1994, the current account deficit reached nearly $29 billion — almost 8% of GDP — causing the large decline in Mexico's foreign reserves shown in Table 8. During 1994, Mexico lost roughly $19 billion in reserves, much of it in the fourth quarter.

TABLE 8
International Reserves, Mexico, 1988–94 ($m)

	1988	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*
Total Reserves minus Gold	5,279	6,329	9,863	17,726	18,942	25,110	6,278
SDRs	394	383	417	586	548	223	117
Foreign Exchange	4,885	5,946	9,446	17,140	18,394	24,886	6,101
Changes in Reserves	7,147	−407	−3,479	−7,834	−1,118	−6,129	18,857

Source: *International Financial Statistics*; IMF; October 1995.

The IMF has argued that large outflows of domestic ('flight') capital were responsible for the depletion of reserves which precipitated the 1994 financial crisis;[23] but the preceding analysis suggests that the Mexican economy was already in serious trouble by the end of 1994. The rapid growth of money, credit and foreign liabilities in the early 1990s had created a steady increase in domestic consumption which far surpassed the meagre growth in production during the period. The inevitable results were large trade and current account deficits. Further, the inflationary pressures associated with these policies would have caused the peso to grow even more overvalued in real terms over time. If the Mexican authorities had continued to support the peso, higher imports, lower exports and the flight of domestic capital would also have continued. Thus, Mexico's decision to devalue the peso — and the financial crisis which ensued — were the unavoidable consequences of growing imbalances in the Mexican economy due in no small part to the large capital inflows of the early 1990s.

4. THE MEXICAN ECONOMY AND THE ELECTION CYCLE

One of the most interesting aspects of Mexico's economic performance over the past several decades has been its strong cyclicality, with periods of rapid growth punctuated by regular economic crises. As noted above, this pattern is closely correlated with the six year presidential election cycle, with crises occurring in 1976, 1982 and 1994 at the beginning of an incoming administration. The absence of a crisis in 1988 is largely explained by Mexico's inability to borrow abroad in the aftermath of the 1982 crisis and Salinas' desire to pursue a 'sound' economic policy in order to regain the confidence of international investors. However, as we have seen, Salinas gradually adopted more expansionary policies, setting the stage for the 1994 crisis.

A typical economic cycle unfolds as follows. After winning the election, the incoming administration initially adopts contractionary policies in order to bring

[23] Ibid. pp. 7–8.

inflation under control and reduce the current account deficit. This usually involves a devaluation of the peso, an increase in domestic interest rates, and a reduction in the public sector deficit. These measures precipitate a sharp recession which reduces consumption and inflation, while the devaluation leads to an improvement in the current account. Within a year or two of taking office, however, these policies gradually give way to more expansionary policies based on increased government spending and the rapid expansion of money and credit. Historically, the growing public sector deficit has been financed through increased foreign borrowing, and over time the 'flight' of domestic capital increases.

As the effects of these stimulative measures work their way through the economy, consumption and inflation begin to rise and the peso gradually becomes overvalued (due to Mexico's traditional use of a controlled exchange rate). This increases demand for imports and reduces exports, causing the trade deficit to widen. Increased trade deficits coupled with the growing cost of foreign debt service produce an ever larger current account deficit which pressures Mexico's international reserves. A crisis is usually averted until after the next election, at which time a panic occurs, often prompted by a devaluation of the peso. The crisis requires a reduction in the government deficit, a contraction of money and credit (and frequently international assistance), and the cycle begins again.

This pattern is clearly visible in Mexico's economic expansion in the early 1970s under President Echeverria. Table 9 provides data on the performance of the Mexican economy during the Echeverria administration (December 1970–December 1976).[24] After adopting deflationary policies in the first year of his presidency to reduce the current account deficit (3.2 per cent of GDP in 1970), Echeverria shifted to expansionary policies in March 1972. Government consumption grew from about eight per cent of GDP in 1971 to over ten per cent in 1975, while the public sector deficit (which includes the operating deficits of state-owned companies) doubled from five per cent of GDP in 1972 to ten per cent in 1975. By 1975, foreign borrowing financed roughly 50 per cent of the government deficit. Expansionary monetary policies accompanied these expansionary fiscal policies, and inflation at the consumer level increased from five per cent in 1972 to about 24 per cent in 1974. Nevertheless, increased foreign borrowing enabled Mexico to maintain an exchange rate of 12.50 pesos per dollar until September 1976 when the peso was devalued to 20 pesos per dollar, with a second devaluation occurring several months later.

Due to much higher rates of inflation in Mexico than the United States, the peso became increasingly overvalued in the early 1970s. This encouraged imports and slowed exports, causing Mexico's current account deficit to widen. Imports

[24] This discussion is based in part on Balassa (1983) and Zedillo Ponce de Leon (1983).

TABLE 9
Economic Indicators, Mexico, 1971–76

	1971	*1972*	*1973*	*1974*	*1975*	*1976*
Gross Domestic Product ($b)	39.2	45.2	55.3	72.0	88.0	89.0
Real GDP Growth	4.2	8.5	8.4	6.1	5.6	4.2
Inflation (CPI)	5.3	5.0	12.0	23.7	15.1	15.8
Public Sector Deficit (%GDP)	2.5	4.9	6.9	7.2	10.0	9.9
Govt. Consumption (%GDP)	7.6	8.7	9.1	9.1	10.4	11.0
Gross Fixed Capital Form. (%GDP)	17.8	18.4	19.2	19.9	21.5	21.0
Exports ($m)	1,409	1,717	2,141	2,999	3,007	3,475
Imports ($m)	−2,158	−2,610	−3656	−5,791	−6,278	−5,771
Current Account ($m)	−835	−916	−1,415	−2,876	−4,042	−3,409
Exchange Rate (peso/$)	12.5	12.5	12.5	12.5	12.5	15.4
Total Foreign Debt ($b)	—	—	8.6	12.8	16.9	21.8

Sources: All series from *International Financial Statistics Yearbook*; IMF; 1989; except: Inflation and Public Sector Deficit taken from Zedillo; *World Development*, **14**, 8, 1986, p. 968; and Total Foreign Debt taken from Grosse; *The World Economy*, **11**, 3, 1988, p. 426.

as a percentage of GDP rose from about 5.5 per cent in 1971 to over seven per cent in 1975, while exports as a per cent of GDP remained virtually unchanged at 3.5 per cent of GDP. The growing trade deficit coupled with the rising cost of servicing foreign debt caused the current account deficit to double from 2.1 per cent of GDP in 1971 to 4.5 per cent of GDP in 1975. Not surprisingly, the rapid growth of imports and the widening trade deficit encouraged protectionism, and Mexico increased both tariffs and quantitative controls in the mid 1970s.[25] The only bright spot in the Mexican economy was the rapid growth of production in the *maquiladora* sector, and the gross value of maquila exports exceeded that of non-maquila manufactured exports for the first time in 1976. As noted above, the growing current account deficit ultimately sparked a financial crisis and led to a series of devaluations in late 1976 and early 1977.

The incoming President, Lopez Portillo, followed a similar set of policies during his administration (1976–1982).[26] The growing imbalances in the Mexican economy are clearly evident in Table 10. Public consumption and investment remained constant in 1977, but over the next four years public consumption increased by 50 per cent and public investment doubled.[27] The rise in public spending created a growing public sector deficit which increased from 6.8 per cent of GDP in 1977 to over 14 per cent in 1981. These deficits were financed through a mix of money creation and foreign borrowing, and Mexico's

[25] See Balassa (1983, pp. 802–3).
[26] This discussion is based in part on Balassa (1983) and Zedillo (1983).
[27] Balassa (1983, p. 804). Balassa notes that these figures — based on constant prices — do not accurately depict the extent of these increases. Based on current prices, public consumption tripled between 1977–81 while public investment increased four times.

TABLE 10
Economic Indicators, Mexico, 1977–82

	1977	*1978*	*1979*	*1980*	*1981*	*1982*
Gross Domestic Product ($b)	81.8	102.5	134.6	194.3	250.1	173.7
Real GDP Growth	3.4	8.2	9.2	8.3	7.9	−0.5
Inflation (CPI)	27.2	16.2	20.0	29.8	28.7	98.9
Public Sector Deficit (%GDP)	6.7	6.7	7.4	7.9	14.7	17.9
Govt. Consumption (%GDP)	10.8	10.9	10.9	10.0	10.8	10.5
Gross Fixed Capital Form. (%GDP)	19.6	21.0	23.4	24.8	26.4	23.0
Exports ($m)	4,604	6,246	9,301	15,511	20,102	21,320
Imports ($m)	−5,625	−7,992	−12,131	−18,896	−23,948	−14,435
Current Account ($m)	−1,854	−3,171	−5,459	−10,750	−16,061	−6,307
Exchange Rate (peso/$)	22.6	22.8	22.8	23.0	24.5	56.4
Total Foreign Debt ($b)	27.1	33.6	40.8	53.8	67.0	82.0

Sources: All series from *International Financial Statistics Yearbook*; IMF; 1989; except: Inflation and Public Sector Deficit taken from Zedillo; *World Development*, **14**, 8, 1986; and Total Foreign Debt taken from Grosse; *The World Economy*, **11**, 3, 1988, p. 426.

foreign debt tripled between 1977 and 1982.[28] The fiscal expansion and the rapid growth of the money supply caused inflation to grow steadily after 1978. Inflation averaged nearly 25 per cent annually between 1978 and 1981 before exploding to 100 per cent in 1982. Once again the peso remained 'fixed' against the dollar, averaging 22.5–23.5 pesos per dollar during most of the period. The peso was devalued in early 1981, reaching 26.2 pesos per dollar by the year end; but even at this level, it was highly overvalued.

The devaluations of 1976–77 and the discovery and subsequent export of oil increased Mexican exports and reduced the current account deficit to about two per cent of GDP in 1977. However, over time the peso became increasingly overvalued, pressuring exports. Exports excluding oil and related products stagnated in dollar terms in the late 1970s, and even with the increase in oil exports — which reached 4.8 per cent of GDP in 1981 — the cost of foreign debt service and a decline in tourism caused the current account deficit to climb to 6.5 per cent of GDP in 1981. The current account deficit was financed through additional foreign borrowing, and by 1982 Mexico had accumulated roughly $80 billion in foreign debts. Mexico's inability to service this debt sparked a foreign exchange crisis and initiated the global 'debt crisis'. Writing in 1986 as Director, Banco de Mexico, future president Ernesto Zedillo observed that the 1976 and 1982 financial crises were closely linked to the size of this external debt.[29] Zedillo noted that growing current account deficits were financed through increased external borrowing, particularly in the 1978-81 period, and that foreign

[28] Figures for Mexico's foreign debt were taken from Grosse (1988).
[29] Zedillo (1983).

borrowing by the private sector (individuals, firms and banks) also increased dramatically.

To some extent the build-up of foreign debt represented a rational reaction to the economic fundamentals of the late 1970s. There was fierce competition among international lenders to grant loans to Mexico's public and private sectors in order to recycle the petro-dollars created by the rising price of oil. Zedillo calculates an implicit interest rate of about ten per cent on the debt accumulated during the late 1970s; however, he notes that when domestic inflation rates are considered, the average real rate on these loans was practically zero. Finally, optimistic expectations about Mexico's oil revenue encouraged additional public sector borrowing and raised lender confidence. Thus, it is not surprising that Mexico's foreign indebtedness grew from roughly \$20 billion in 1976 to \$40 billion in 1979 and over \$80 billion in 1982.[30]

The 1981–82 debt crisis was the outgrowth of four factors: (1) the expansionary policies of the Lopez Portillo administration, (2) over-optimistic forecasts about PEMEX oil exports and revenue, (3) the rapid accumulation of public and private foreign debt, and (4) the maintenance of an overvalued exchange rate. When the current account deficit reached \$16 billion in 1981 due to lower than expected oil revenues, foreign lenders became increasingly unwilling to extend new loans to Mexico and the country had difficulty servicing its massive foreign debts. These problems were exacerbated by the 'flight' of large amounts of domestic capital during the late 1970s and early 1980s.[31] Growing expectations of a peso devaluation encouraged these outflows, and the flows corresponded closely with Mexico's rising foreign indebtedness and the depletion of its international reserves. According to one estimate, \$26.5 billion of domestic capital left Mexico between 1979–82 alone.[32]

The final year of the Lopez Portillo administration was spent dealing with the crisis. A 40 per cent devaluation of the peso was announced in early 1982, followed by a stabilisation package which limited wage increases to ten per cent and called for increases in the prices of goods and services produced by the public sector. Unfortunately, these measures were quickly overridden, setting the stage for spiraling inflation. On August 20, 1982 Mexico requested a 3 month moratorium on principal repayments from a group of important creditor banks. Also in August Mexico obtained credits from the US Treasury and began negotiating with the IMF and Bank of International Settlements for additional credits. In September, Lopez Portillo nationalised the banking industry and implemented tight foreign exchange controls. As he left office in December 1982,

[30] Grosse (1988).
[31] See Eggerstedt et al., op. cit.; Pastor, op. cit.; and Zedillo, op. cit., p. 977.
[32] Estimates of capital flight from Mexico and other Latin American nations can be found in Eggerstedt et al., op. cit.

TABLE 11
Economic Indicators, Mexico, 1983–88

	1983	*1984*	*1985*	*1986*	*1987*	*1988*
Gross Domestic Product ($b)	148.9	175.6	184.6	129.9	140.0	171.8
Real GDP Growth	−4.2	3.6	2.6	−3.8	1.9	1.2
Inflation (CPI)	101.5	65.5	57.7	86.2	131.8	114.2
Govt. Deficit (%GDP)	7.6	7.1	8.4	13.1	13.6	10.3
Govt. Consumption (%GDP)	8.8	9.2	9.2	9.1	8.9	8.6
Gross Fixed Capital Form. (%GDP)	20.8	19.9	19.1	19.5	19.0	19.3
Exports ($m)	22,312	24,196	21,663	16,031	20,655	20,566
Imports ($m)	−8,550	−11,255	−13,212	−11,432	−12,222	−18,898
Current Account ($m)	5,403	4,194	1,130	−1,673	3,968	−2,443
Exchange Rate (peso/$)	120.1	167.8	256.9	611.8	1,378.2	2,273.1
Total Foreign Debt ($b)	89.3	97.5	98.1	107.6	107.6	99.2

Source: *International Financial Statistics Yearbook*; IMF; 1993; except: Total Foreign Debt taken from Grosse; *The World Economy*, **11**, 3, 1988, p. 426.

the Mexican economy was in crisis, with real GDP falling 0.5 per cent for the year and inflation reaching 100 per cent.[33]

The incoming administration of Miguel de la Madrid Hurtado (1982–88) followed the familiar pattern with disastrous results.[34] Table 11 details the performance of the Mexican economy under his administration. One of his first objectives was to reduce the public sector deficit by cutting expenditures and increasing the value added and income taxes and the prices of public services. Madrid also established a two-tier exchange rate system which controlled the exchange rate for exports and imports and foreign capital flows, but allowed other transactions to occur at a market rate. The adjustment programme caused a sharp contraction in the Mexican economy in 1983 with steep drops in construction and manufacturing. The contraction also led to a sharp drop in imports, and in 1983 Mexico ran a $14 billion trade surplus and a $5 billion current account surplus. In addition, the government deficit fell from 15 per cent of GDP in 1982 to less than eight per cent in 1983 and 1984. (Note: These figures are not directly comparable to those in Tables 9 and 10.) But despite these accomplishments, inflation exceeded 100 per cent in 1983 before moderating somewhat in 1984–85.

The bulk of Madrid's administration was spent trying to reschedule and renegotiate Mexico's external debt. In 1983, commercial banks agreed to reschedule $23 billion in debt due in 1982–4 and extended about $5 billion in additional loans. A further agreement involving the rescheduling of about $44 billion in public sector debts due before 1983 and about $8 billion borrowed in

[33] Events leading up to the debt crisis are discussed in EIU, op. cit.; Grosse, op. cit.; and Zedillo, op. cit.
[34] This discussion is based in part on Ten Kate (1992) and Zedillo, op. cit.

1983–4 was reached in 1985, but had to be renegotiated in 1986. At this time, commercial banks agreed to loan Mexico an additional $8 billion and multilateral agencies pledged about $6 billion.[35] Debt-equity swaps and debt-for-bonds auctions during the 1986–88 period were largely unsuccessful in reducing the outstanding debt, and a comprehensive agreement between the Mexican government and its international creditors — the Brady Plan — was not reached until 1989 during the Salinas administration.[36] The plan allowed banks to exchange their outstanding Mexican loans for long term bonds, and provided an additional $6 billion in loans from the IMF, World Bank and Japanese government to assist with interest and principal payments.

Beginning in 1985, Mexico embarked on a programme of trade liberalisation. In July of that year, licences were eliminated for most goods although tariffs were increased slightly to protect local producers. In addition, the peso was devalued by 20 per cent and its rate of depreciation was kept above the inflation rate allowing the real exchange rate to depreciate even further. In 1986, tariffs were dramatically reduced and Mexico joined the GATT. Further tariff reductions occurred in 1987 and Mexico made the transition to the Harmonized System in 1988.[37] Despite these changes, Mexican exports (excluding exports from *maquiladoras*) declined from a peak of $24 billion in 1984 to $16 billion in 1986 due largely to the declining price of oil, before rebounding in 1987. Conversely, after declining from $24 billion in 1981 to just $8 billion in 1983, imports climbed steadily reaching about $19 billion in 1988. Nevertheless, Mexico achieved current account surpluses in 1983, 84, 85, and 87 and ran only a small deficit in 1986.

Perhaps the most intractable problem during the 1980s was inflation. Due to the rapid growth of government consumption, the money supply, and domestic credit after 1984, inflation averaged 100 per cent annually between 1986–88. In order to control inflation and provide economic stability, Carlos Salinas — then Budget and Programming Secretary — forged the Economic Solidarity Pact (Pacto) between government, business and labour.[38] The pact, which went into effect in December 1987: (1) raised the prices of many government services and reduced government spending in order to reduce the budget deficit, (2) adjusted the controlled exchange rate to bring it in line with the market rate, (3) raised wages and indexed future increases to expected inflation, (4) obtained a pledge from industry and labour not to seek additional price and wage increases, and (5) provided further trade reform to expose domestic producers to greater price competition.

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[35] EIU, op. cit.

[36] For a contemporary analysis of the Brady Plan see Sachs (1989). The plan's effect on Mexico's outstanding debt is explained in EIU, Ibid.

[37] Ten Kate, op. cit.

[38] The Pacto is discussed in Ten Kate, op. cit.

The Pacto provided a foundation for the economic recovery which occurred during Salinas' term as President (1988–1994). As seen above, the Mexican economy improved considerably in the early 1990s (see Table 1); however, over time Salinas adopted many of the expansionary policies of his predecessors. By late 1994 the familiar combination of a growing trade deficit, the high cost of foreign debt service, and the 'flight' of domestic capital created a massive current account deficit which depleted Mexico's foreign reserves. Although a full-blown crisis was averted until after the election of Ernesto Zedillo, the Mexican economy was clearly in trouble.

Incoming President Zedillo (1994–2000) immediately devalued the peso by 13 per cent in December 1994. Over the next several months, the peso lost about half of its value against the dollar and Mexican financial markets collapsed as foreign and domestic investors withdrew their capital. The devaluation was accompanied by the traditional package of measures to stabilise the economy, reduce the budget deficit, slow imports and cut the current account deficit.[39] Domestic interest rates were raised, the value added tax and the cost of public services and fuel were increased, and money and credit were tightened. It was also announced that billions of dollars would be raised through the privatisation of ports, railroads and petrochemical plants, and the granting of telecom licences which would be used to service the foreign debt. In addition, several plans were implemented to stabilise and recapitalise the banking system which experienced a high percentage of non-performing loans.[40] Finally, in early 1995 a package of $50 billion in loans and credits was arranged with the United States, the IMF and the Bank of International Settlements which enabled Mexico to refinance several billion in dollar denominated debt and meet its foreign obligations.

Not surprisingly, these measures caused a sharp contraction in the Mexican economy. Real GDP fell over six per cent in 1995 and industrial production fell over seven per cent. The devaluation coupled with the decline in economic activity slowed imports and boosted exports, allowing Mexico to achieve a $7 billion merchandise trade surplus in 1995 and to bring the current account back into balance.[41] Surprisingly, roughly $7 billion in new direct investment entered Mexico in 1995. On the other hand, over $10 billion in foreign portfolio investment was withdrawn during the year, most of it in the first quarter.[42] Unfortunately, the improvements in the trade and current account balances came at a high cost to the Mexican people, and pressures began to build for more expansionary policies.

[39] An overview of Zedillo's early response to the 1994 crisis appears in *Business Week* (1995b) and Hughes (1995).
[40] See IMF (1995a), op. cit., pp. 126–7.
[41] IMF (1997), op. cit.
[42] IMF, Ibid.

If history is any guide, political necessity will force Zedillo to increase government spending and expand the economy at some point during his presidency risking another crisis at the turn of the century. In fact, this appears to have started in late 1995. In the first half of 1995, Mexico ran a small public sector surplus reflecting tighter control over spending and increased revenue. However, by the second half of the year a large increase in government spending pushed the public sector into deficit.[43] Further, in October 1996, public pressure forced the Zedillo administration to halt the privitisation of 61 state-owned petrochemical plants, eliminating an important potential source of foreign currency and obligating the public sector to defray the cost of modernising these facilities.[44] Over time, monetary policy may also become more accommodating, fueling a burst of economic activity and raising the spectre of inflation. As long as Mexico can keep inflation under control and its trade and current accounts in balance, international investors will eventually return with large amounts of foreign capital, causing the price of Mexican financial assets to skyrocket and sustaining the economic recovery. Then, around the time of the next presidential election in 2000, some event — such as the repayment of a large amount of Mexican debt, a growing current account deficit, or the devaluation of the peso — will trigger a loss of investor confidence and the rapid withdrawal of foreign and domestic capital, causing yet another crisis.

On the other hand, it is possible that things will be different this time. The peso is now 'floating' more or less freely which should improve the trade balance and eliminate one important cause of capital flight — an overvalued currency. Mexican exports reached record levels (in dollar terms) in 1995 while imports declined slightly, creating the first trade surplus of the 1990s and the lowest current account deficit in a decade.[45] The rise in exports could be associated with direct investments made earlier in the decade, in which case exports, production and employment may continue to grow into the next century. Clearly, this would have a positive effect on the economy. Equally important, the unsustainable capital inflows of the early 1990s slowed to a more realistic pace in 1995–96, and the mix shifted away from portfolio investment toward direct investment. This should allow Mexican financial assets to stabilise and reduce expansionary pressures in the banking system, and should add productive capacity to the economy. If these trends continue, and if the Zedillo administration can resist domestic pressures to expand the economy and continue to implement economic and political reforms, Mexico could experience a period of relatively stable, sustainable growth in the late 1990s and beyond. Given the past two and a half decades of economic turbulence, this would be a welcome outcome indeed.

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[43] IMF, Ibid.

[44] *The New York Times* (1996).

[45] IMF (1997), op. cit.

5. CONCLUSIONS AND IMPLICATIONS

At this point it is useful to ask what general lessons Mexico's 1994–95 experience offers other developing countries that receive large inflows of foreign capital relative to the size and structure of their economies. Foreign capital has traditionally played an important role in financing infrastructure development and economic growth in developing countries. For example, British and European (portfolio) investment in the United States helped to finance the construction of railroads and canals in the latter half of the 19th century, and US lending to Latin America and Europe in the 1920s assisted these nations in exploiting local natural resources, modernising existing industries, and building (or re-building) local infrastructures.[46] However, history strongly suggests that an over-dependence on foreign capital has serious ramifications for both the capital importer and exporter. These include: balance of payments and exchange rate crises, the risk of speculative bubbles, and the misallocation of domestic resources for the former; and the risk of capital losses due to political and economic instability or business failure and default for the latter. Further, as Mexico's recent experience clearly illustrates, the adverse effects of a sudden outflow of capital are not limited to financial markets in the host country, but can quickly spread around the globe as foreign investors seek to limit their exposure to other 'emerging' markets. Thus, the most important lesson to emerge from this study is that, although large inflows of foreign capital are not unhealthy in and of themselves, they clearly engender certain risks, and must be carefully monitored and controlled to maximise their potential benefits.

In Mexico's case, an inordinate amount of the capital inflows of the early 1990s (and earlier periods) were used for unproductive purposes, such as supporting an over-valued peso, fueling speculative investments in local real estate and financial assets, encouraging increased private and public consumption, and financing domestic 'capital flight'. Further, foreign demand for Mexican portfolio investments may have encouraged the public sector to over-issue debt securities and run large fiscal deficits — much as it did in the United States during the 1980s. As a result, a large portion of the capital flows into Mexico did not result in economically productive investments. This is clearly evident from the minimal change in the structure of the Mexican economy between 1970 and 1993. Although the percentage of GDP derived from agriculture (i.e. the primary sector) declined from twelve to eight per cent over the period, industry also declined from 29 per cent of GDP in 1970 to 28 per cent in 1993 (with manufacturing falling from 22 to 20 per cent), while the service

[46] For information on inward FDI in the United States see Wilkins (1989) and Techova, Levy-Leboyer and Nussbaum (1986). For information on US investment in Latin America see Grosse, op. cit.

sector increased from 59 per cent of GDP in 1970 to 63 per cent in 1993.[47] Given the size of Mexico's capital inflows over this 25 year period, one would expect to see a much greater shift toward manufacturing and industry, particularly since manufactured exports are needed to offset the negative impact that the payment of interest, dividends and other fees to foreigners has on the current account. Thus, to the extent possible, countries may want to encourage long-term direct investment in productive assets — those which generate employment, output and exports — over more speculative portfolio investment in financial assets and government securities.

A second important lesson to emerge from this study is that the monetary authority and domestic banks play a critical role in determining the ultimate impact that large capital inflows have on the domestic economy. If the money supply and domestic credit are allowed to rapidly expand — particularly in response to speculative inflows of capital — the inevitable result will be rising inflation, growing current account deficits, and a higher level of risk in the banking system. Further, if capital flows suddenly reverse, the resulting contraction of the economy may create severe economic dislocations including the collapse of the banking system. Consequently, monetary authorities must carefully monitor events in local financial markets and the domestic economy and be willing to intervene in the foreign exchange market, purchase or sell government securities, control the activities of domestic banks, and in extreme cases restrict certain types of foreign investments or trading activities.[48] However, the execution of such actions requires that the monetary authority be given the full power to manage monetary policy and that these decisions remain outside the domestic political process. Of course, this does not imply that the central bank should be insensitive to the very real economic impact of their actions; rather that they must be allowed to weigh the potential economic and social costs and benefits of available policy options in an environment that is free from overt political pressure. Clearly, this condition is not currently satisfied in many developing countries.

Finally, Mexico's recent woes demonstrate the enormous difficulties involved in sustaining high levels of economic growth and development in emerging economies. The transition from a traditional or controlled economy to a modern market economy is not an easy one, and the enormous economic, social and political dislocations associated with the development of the present industrial nations have frequently been ignored or seriously downplayed. Thus, in the final analysis, Mexico's 1994–95 financial and economic crisis may best be seen as an

[47] World Bank (1995).

[48] It is interesting to note that developing countries are not alone in this regard. In 1978, the Swiss National Bank was forced to impose severe restrictions on deposits by non-Swiss residents — resulting in negative interest rates — in order to slow the adverse effect of capital inflows into the Swiss franc.

inevitable part of the growth cycle of individual countries and the global economy.

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